

PATENT  
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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

MAEKAWA et al.

Application No.: Unassigned

Art Unit: Unassigned

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Examiner: Unassigned

For: SOFTWARE MANAGEMENT SYSTEM

**CLAIMS PENDING AFTER PRELIMINARY AMENDMENT**

1. A software management system comprising a network system which includes a center server and a local server connected to said center server via a wide-area network, wherein:

    said center server includes:

        an application that operates upon being downloaded onto said local server;

        a script describing operation of the application; and

        fault countermeasure means for coping with occurrence of a fault;  
and

    said local server includes:

        a network-directed language execution environment;

        remote management means for downloading the application from said center server, and for deleting the application after processing has finished;

        script interpretation means for interpreting the script and for requesting the application to execute; and

highly reliable means for recording event data that occur while the application is being executed, for managing data when a fault has occurred, and for executing restoration processing.

2. The software management system according to claim 1, wherein said remote management means includes:

center server data and application data;

request processing means that responds to a request for executing the application;

application downloading means for downloading the application from said center server based upon the center server data and the application data; and

application management means for executing and deleting the application based on the application data.

3. The software management system according to claim 1, wherein said script interpretation means includes:

a script definition and a list of events;

interpretation means for interpreting the script in accordance with the script definition and for outputting an event corresponding to content of the script; and

event drive means for fetching the event and for picking up processing that is driven by the event according to the list of events.

4. The software management system according to claim 1, wherein the script is described in XML (extensible markup language), and the script definition is described in DTD (document type definition).

5. The software management system according to claim 1, wherein said fault countermeasure means includes:

fault data-obtaining means for obtaining fault data from said local server when a fault has occurred; and

fault countermeasure-notifying means for determining the countermeasure against the fault when the fault has occurred and for notifying said local server; and

said highly reliable means includes:

fault detector means for detecting occurrence of a fault;

fault data correction means for correcting the fault data when the fault has occurred;

fault-notifying means for sending the fault data to said center server;

restoration means for restoring, after the fault, relying upon the countermeasure against the fault from said center server; and

event collection means for collecting and recording the event data.

6. The software management system according to claim 5, wherein said fault countermeasure means includes:

a list of fault countermeasures, storing countermeasures against faults for each kind of the fault data; and

said fault countermeasure-notifying means includes:

fault countermeasure detector means for detecting a countermeasure against a fault corresponding to the kind of the fault data based upon a list of the fault countermeasures; and

notifying means for sending the countermeasure against fault to said local server.

7. The software management system according to claim 1, wherein said fault countermeasure means includes:

fault data-obtaining means for obtaining fault data concerning when the fault has occurred, from said local server; and

said highly reliable means includes:

fault detector means for detecting occurrence of a fault;

fault data collection means for collecting fault data when the fault has occurred;

restoration means for autonomously coping with occurrence of a fault and automatically restoring after the fault;

notifying means for sending the fault data and automatic restoration data to said center server; and

event collection means for collecting and recording the event data.

8. The software management system according to claim 1, including a plurality of local servers, each local server including said network-directed language execution environment, said remote management means, said script interpretation means, and said highly reliable means.

9. The software management system according to claim 8, including a plurality of center servers, each center server including the application, the script, and said fault countermeasure means.

10. The software management system according to claim 1, including a plurality of said local servers, at least one of said local servers including said network-directed language execution environment, said remote management means, said script interpretation means, and said highly reliable means, and other local servers including said network-directed language execution

environment, said remote management means, and said script interpretation means.

11. A software management system comprising a network system which includes a center server and a local server connected to said center server via a wide-area network, wherein:

    said center server includes:

        an application that operates upon being downloaded onto said local server; and

        a script describing operation of the application; and

    said local server includes:

        a network-directed language execution environment;

        remote management means for downloading the application from said center server, and for deleting the application after processing has finished; and

        script interpretation means for interpreting the script and for requesting the application to execute.

12. (Amended) The software management system according to claim 11, including a plurality of local servers, each local server including said network-directed language execution environment, said remote management means, and said script interpretation means.

13. A software management system comprising a network system which includes a center server and a local server connected to said center server via a wide-area network, wherein:

    said center server includes:

an application that operates upon being downloaded on-to said local server; and

fault countermeasure means for coping with occurrence of a fault;  
and

said local server includes:

a network-directed language execution environment;  
remote management means for downloading the application from  
said center server, and for deleting the application after processing has finished;  
and

highly reliable means for recording event data that occur while the application is being executed, for managing data when a fault has occurred, and for executing restoration processing.

14. The software management system according to claim 13, including a plurality of local servers, each local server including said network-directed language execution environment, said remote management means, and said highly reliable means.